

CLAIMS

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A material consisting essentially of:
silica; and
nucleic acids covalently bonded to the silica.
2. (Original) The material of claim 1, wherein the nucleic acids are DNA.
3. (Original) The material of claim 1, wherein the material is a flat surface.
4. (Original) The material of claim 1, wherein the material is a bead.
5. (Original) The material of claim 1, wherein the material is an array of fibers.
6. (Original) The material of claim 1, wherein the silica is at least about 80% pure silicon dioxide.
7. (Original) The material of claim 1, wherein the silica is at least about 90% pure silicon dioxide.
8. (Original) The material of claim 1, wherein the silica is at least about 95% pure silicon dioxide.
9. (Original) The material of claim 1, wherein the silica is pure silicon dioxide.
10. (Original) A material consisting of:
silica; and
nucleic acids covalently bonded to the silica.

11. (Original) The material of claim 10, wherein the nucleic acids are DNA.
12. (Original) The material of claim 10, wherein the material is a flat surface.
13. (Original) The material of claim 10, wherein the material is a bead.
14. (Original) The material of claim 10, wherein the material is an array of fibers.
15. (Original) The material of claim 10, wherein the silica is at least about 80% pure silicon dioxide.
16. (Original) The material of claim 10, wherein the silica is at least about 90% pure silicon dioxide.
17. (Original) The material of claim 10, wherein the silica is at least about 95% pure silicon dioxide.
18. (Original) The material of claim 10, wherein the silica is pure silicon dioxide.
19. (Previously Presented) A method for binding nucleic acids to a surface, the method comprising:
 providing a mixture comprising nucleic acids and a charged material comprising a xanthine compound; and
 contacting the mixture and a surface to produce a bound material, wherein the bound material comprises nucleic acids covalently bonded to the surface.
- 20-25. (Cancelled).
26. (Original) The method of claim 19, wherein the surface consists essentially of silica.
27. (Original) The method of claim 19, wherein the surface consists of silica.

28. (Original) The method of claim 19, further comprising removing the charged material after the contacting step.